breech presentation. Some of the children perished during birth; others at varying periods afterward; 24 per cent. of these had other birth-lesions; these were principally lacerations or injuries of the cerebral mass. In the whole number of children dying, 64 per cent. died of birth-injury; 29 per cent. perished of disease or injury resulting indirectly from birth.

It was observed that prematurely born children most often sustain birth-injury, while those born at term develop post-partum diseases. So far as regions of the spine were concerned, in which bleeding was most frequent, in three cases extravasation occurred in the medulla; in two cases in the cervical region; in three cases in the cervical and dorsal; and in two in the dorsal and lumbar. These were all in children who had been extracted in breech presentation. So far as prognosis is concerned, when bleeding occurred into the region of the medulla the child died. The result depended, of course, somewhat upon the amount of hemorrhage, although that did not seem a deciding factor. In asphyxiated children and in premature children any strong mechanical excitement, such as extraction, and above all Schultze's manipulation, can cause such hemorrhage. The prevention of this complication consists in warding off all infection during and after labor and in using those methods of delivery which offer least violence to the fœtus. It is especially noticeable that the cautious application of forceps gave excellent results.

GYNECOLOGY.

UNDER THE CHARGE OF

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Renewal of the Endometrium after Cauterization.—JUNG (*Centralblatt für Gynäkologie*, 1897, No. 18) contributes an interesting paper on this subject, based on microscopical studies of a uterus removed four months after thorough cauterization of its interior. The operation was performed for obstinate hemorrhage, which had not been controlled by curettement and application of chloride of zinc paste. An entire cast of the uterine cavity had been passed. On examination of the endometrium it was found that renewal of the epithelial layer had begun, though only over a small region. The new mucosa was in the same hyperplastic condition as before the cauterization. This proves that the endometrium "is a tissue possessing an inexhaustible power of regeneration," no matter how thoroughly it may be destroyed. Microscopical investigations by Werth show that young connective tissue is renewed within a few days after the traumatism from similar tissue in the muscularis. The former is only temporary, being replaced as early as the tenth day by normal stroma. The glands redevelop from remnants of pre-existing glands, the superficial epithelium from that lining the mouths of the newly formed glands. The growth of the new vessels keeps

pace with that of the regenerated mucosa, being complete even on the fifth day.

Bossi's conclusions were somewhat different. He removed the endometrium and a portion of the muscularis from the uteri of dogs, and found that regeneration was complete in three months. He observed that the glands developed from remains of old glands only at the border of the raw surface; in the centre of the wound the glands were formed by ingrowth of the new surface-epithelium into the subjacent connective tissue. The writer finds the conditions in his own specimen similar to those caused by experimental traumatism in Bossi's cases; the results were different, since after the cauterization regeneration was only partial, and the mucosa was renewed in six weeks, as shown by a return of the hemorrhages.

The writer concludes that the use of chloride of zinc within the uterine cavity for the relief of hemorrhage, in paste or strong solutions, is reprehensible. Although the destructive character of the escharotic is marked, it is uneven and cannot be controlled, while there is great danger of producing stenosis. The application should not be repeated within less than two weeks, in order that the raw surface may have time to heal. The use of a 50 per cent. solution, applied on cotton, is preferable to pencils or intra-uterine injections.

Conception after Curettement of the Cancerous Cervix.—LEINZINGER (*Ibid.*) reports a case of this character, in which a patient was admitted to the hospital with inoperable carcinoma of the cervix. She was curetted on November 26, 1895, and was discharged improved. She remained well for ten months, when the operation was repeated, November 17, 1896; she became septic, and was again curetted; aborted with a four and a half months' fœtus, and died eleven days later. The writer emphasizes the following points: 1. The relief afforded by the curettement, extending over nearly a year. 2. The occurrence of pregnancy, which seemed to have no unfavorable effect upon the development of the disease. 3. The absence of all symptoms which would awaken the suspicion of existing pregnancy. (The enlargement of the uterus was supposed to be due to hydrometra.) 4. The profuse hemorrhage attending the third operation undoubtedly hastened the fatal termination. [We have been personally cognizant of several cases in which abortion followed curettement for advanced carcinoma of the cervix, pregnancy being unsuspected; in one instance of recurrence after high amputation we succeeded in carrying the woman to full term and a successful delivery, and were afterward able to extirpate the uterus, the patient being still in good health four years after the operation.—H. C. C.]

Vaginal Hysterectomy with the Use of Clamps.—AREND (*Ibid.*) repeats the usual arguments in favor of clamps *versus* ligatures. He claims that the pain caused by the former is not greater than when ligatures are used, and that the danger of hemorrhage is much less, though he always removes the instruments at the end of forty-eight hours, the gauze being entirely withdrawn on the fifth or sixth day.

[Too little stress is laid upon the extensive sloughing-process which attends the use of clamps, and requires most careful after-treatment to insure a rapid